

# **Technology Steering Committee**

# MEETING MINUTES Friday December 10, 2004 10:00 am – Noon Provo Regional Center 150 East Center

#### **Attendance:**

Glen Murray (Tooele County SO) Barry Bradley (Sanpete County SO) Phil Bates (State DPS) Jake Hunt (UCAN) Jeff Dial (St. George City) Steve Proctor (UCAN) Tim Cornia (State DPS) Tim Slocum (State Corrections) Jon Tait (Motorola) Merv Gustin (Duchesne County SO) Boyd Webb (State ITS) Lloyd Johnson (State DNR) Doug Chandler (State ITS) Lee Kelley (Utah National Guard)\* Jon Coulam (Logan City) Brent Thomas (State DES) Bryan Low (Logan City) Lou Little (State DES) Floyd Ritter (State ITS) Rick Bailey (San Juan County)\* Forrest Roper (Millard County SO) Glen Murray (Tooele County)

\* Teleconferenced

## I. Approval of Minutes

The October minutes were unanimously approved without change.

## II. Narrowband Migration

At the suggestion of several in attendance at the October UWIN TSC meeting, Boyd Webb expanded the scope of his Project Team's previous direction, and altered the document significantly. Boyd went through the document in some detail. The new document contains a brief history of FCC actions, documents, and decisions. There is a section that discusses the temporary 'stay' of Jan 2004 deadline of wideband applications. We are still operating under that stay, so wideband applications are still being accepted. 21 rural counties are almost exclusively VHF wideband, while the 8-county Wasatch Front region is almost exclusively operating on UCAN 800MHz.

Boyd made a rough estimate of user radios that are using VHF. The count was based, by county, on the number of radios listed on the licenses. Boyd estimated 5,760 VHF radios currently operating on VHF wideband channels.

Jake Hunt asked for the opinion of the rural agencies represented in the meeting today. There was some consensus that the count was about 10% lower that reality. Boyd pointed out that volunteer services such as fire and search and rescue agencies, makes a count difficult. There seems to be a frequent situation wherein an agency purchases narrowband-compliant radios, and then hands the non-compliant radios to their volunteer agencies rather than sending them to surplus.

Boyd estimated that 60% of the estimated 5,760 radios are not narrowband compliant. Assuming 3,500 radios have to be replaced, the cost is over \$2M. Re-licensing fees would add another \$186K. A fairly conservative estimate for statewide migration to narrowband migration would be at least \$2.5M.

Jake Hunt suggested that rather than putting down a solid estimate, a range should be listed. Solid numbers tend to be hung around one's neck once they're presented. Tim Cornia agreed with Jake. Boyd said he would alter the document accordingly.

Jeff Dial suggested that each region should take responsibility for getting a more accurate count. Rick Bailey suggested that each Homeland Defense region take on the task. Boyd reported that testing has been done on how wideband radios work on narrowband repeaters (and vice-versa). In general, communication can still occur, but sound quality is diminished. The quality is diminished enough that users would not want to do it for very long.

Strategy #1: Migrate away from VHF altogether and move to 800MHz trunking.

**Strategy #2**: Reband the VHF spectrum.

Affectionately referred to as the "Ritter Plan". If agencies throughout the state plan to stay in VHF long-term, then we need to look at this option. The current system is ad-hoc and is increasingly untenable, particularly for any type of growth.

<u>Strategy #3</u>: Re-license current frequencies in narrowband. Strategy #2 will require a lot of financial expenditure. This option is by far the least expensive.

**RECOMMENDATION**: It is the recommendation of the Narrowband Migration Team that a decision be reached in the UWIN Technical Steering Committee relative to the strategies presented above, before a formal recommendation is made to the UWIN Executive Committee for approval.

There was some discussion about whether or not the Governance Board should see all three options, or just have the Technical Steering Committee choose one, and present a single option to the Governance board. It was widely held that some mention of all three options should be presented, with a single recommendation from the TSC.

Jake Hunt asked if VHF infrastructure (base stations, repeaters, etc) was included in the estimates for narrowband migration. Boyd stated that it was not. The intent was to gather info on user equipment.

An appendix of the report listed compliant vs. non-compliant radios. Jon Tait (Motorola) noted that there were several incorrect entries. Jon said he would put together an updated list of Motorola radios.

Floyd took a few minutes to clarify the plan that he put together (Strategy #2). Floyd assumed that the FCC was going to stick by their guns and require that everyone move to the narrowband frequencies. They have since allowed the VHF existing frequencies to narrowband where they are instead of moving. The end result is that public safety spectrum will no longer look forward to twice as many available channels.

Steve Proctor pointed out that the new 700MHz spectrum is where the FCC intends that public safety will migrate to long-term. There are nearby states that are installing VHF infrastructure. Wyoming is installing an Astro-Digital VHF trunking system.

There was discussion about the differing radio infrastructures. Doug Chandler pointed out his favorite 'soap box': We will never be together on a single infrastructure (800MHz, 700MHz, 150MHz, trunking, conventional) as long as infrastructures are funded solely by user fees.

#### **III.** Wireless Ethernet

Tim Cornia has had a challenge getting participation on his Project Team. To date, the document his team has written so far only has verbiage from Tim and Lloyd Johnson with DNR. The only other feedback has been from a state agency. Tim expressed concern that he needs feedback and input from as many agencies as possible, to include legislative, county, city etc.

The State CIO's office is in the process of writing a security rule for executive branch agencies. Executive branch agencies will be mandated to follow that rule. Ramifications ITS being a service provider could encourage non-state agencies to follow the rules by requiring it as part of the agreement to connect to the state's WAN/Internet. Tim's intent is to create a security document that might serve as a 'best practices' guide for non-executive branch agencies. The idea is to get the CIO's office to approve a document that is less strict than what is currently being proposed.

Lloyd Johnson noted that the currently proposed document that the CIO's office is looking at will most likely create two tiers. State agencies will end up operating at one security level, while non-state agencies connecting hot spots to the state WAN, will be operating at a different one (probably lower). There are non-state agencies around the state that are working on creative hot-spot (802.11) solutions. We don't want to discourage that. Tim noted that the Wireless Ethernet Project Team wants to be pro-active rather than passive. The CIO's office may be poised to pass the currently proposed high-level security proposal. If agencies are on different security levels, interoperability will be compromised. Feedback is encouraged, necessary, and requested.

## IV. Mesh Networking

Tim Cornia briefly covered the possibility of using the new 700MHz mobile data network to support other wireless devices in an incident command situation. Mesh networking would be one way to accomplish this.

#### V. Mobile Data

Forrest Roper noted that the Aqueduct site is up and operational. Testing is underway for geographic coverage. These tests have just started. There are no mobile units deployed yet (other than the ones being used in the test now). Millard County's new sites are under construction. The state radio shop has received about 100 mobile units so far. Tim Cornia thought it would be a good idea to create a document for customers (or perspective customers) to refer to when bringing a unit on the system. Phil Bates (DPS) gave a brief overview of the build out schedule, referring to a map of sites. Glen Murray (Tooele County) noted that due to television translators on the 700MHz channels in his region, Tooele county cannot roll over their UHF mobile to 700MHz until the UEN translators are moved to other frequencies. That is scheduled to happen sometime next spring.

#### VI. Omni-Link Interoperability

Phil Bates noted that Vernal is now on-line and working well. Sheriff Gustin noted that a recent National Guard exercise went well thanks to OmniLink. Box Elder will be attached in January. Logan should be next (possible February). Grand and San Juan Counties are after that. Rick Bailey anticipates spring for being up on their new consoles.

#### VII. 911 Committee

Phil Bates gave an update on the new 911 committee. House Bill 36 passed last year, creating a new 911 Committee. Qwest, local carriers, rural utah carriers, wireless carriers and PSAPsare represented. There is a new fund via surcharges from 911. Two priorities from that new funding:

- 1. Upgrade current PSAP and wireless vendor technologies to Phase 2 wireless.
- 2. Bring all areas up to enhanced 911 for location info for land-line 911 callers.

The committee is also tasked with providing accounting for 911 monies. The committee will be going to PSAP's to collect info on what their technology levels are. Mapping info is also being collected and updated. DPS is tasked with providing staff and resources to support the committee. DPS is working on training curriculums.

### **VIII.** UWIN Governance Board Items

Doug shared a list of proposed action items that the Governance Board looked at last month in the Governance Board meeting. Steve Proctor suggested that the Governance Board needs to provide a write-up of what each of the items means to wireless users.

It was proposed that we should keep our eye out for Software Defined Radio (SDR) technologies.

Steve Proctor suggested that we create some kind of committee to look at available mobile data technologies.

#### IX. Other Business

#### a. 700 RPC

Steve gave a brief update on the Utah Regional Planning Committee's progress with the Region 41 plan.

#### b. Legislative Representation

Phil Bates suggested that the Legislative IT Director should be invited to the UWIN TSC meetings.

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### X. Next Meeting

Friday, January 21, 2005 10:00 am - noon St. George Police Department 175 East 200 North

http://uwin.utah.gov